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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,317	07/18/2003	Ashvin D. Desai	87344.1524	2539

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EXAMINER	
SAVAGE, MATTHEW O	
ART UNIT	**PAPER NUMBER**
1724	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,317	DESAI ET AL.	
	Examiner	Art Unit	
	Matthew O. Savage	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 August 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The drawing corrections to FIG. 4 filed on 8-15-05 have not been approved for the reasons set forth below.

The lead line for element 116 is incorrect in FIG. 4 (the lead line should be redrawn so as to point out the seat adjacent exit port 38).

A proposed corrected FIG. 4 including all of the changes proposed in the response filed on 8-15-05 and the change listed above is required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, and 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1, and 4-6, it is unclear as to how the first and second strainer chambers are formed since no structure for defining the chambers has been recited in those claims.

With respect to claims 1, 4, 5, and 6, it is unclear as to how the "duplex strainer" can provide a straining function since no elements for providing a straining function have been recited in those claims.

Concerning line 2 of claim 7, it is unclear as to what configuration "at least partially unitarily" implies.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al in view of Elliott and Rea et al.

With respect to claim 1, Oliver et al disclose discloses a duplex strainer for straining a fluid comprising a housing having an inlet port 15 and an outlet port 16 (see FIGS. 1 and 2), a first strainer chamber 12 having first and second ports in separate fluid communication with the housing (e.g., the flow passages facing the valves 17 and 18, respectively), a second strainer chamber 13 having a third port (e.g., adjacent valve 17) and facing the first port and a fourth port (e.g., adjacent valve 18) facing the second port in separate fluid communication with the housing, a first valve chamber (e.g., containing valve 17) defined by the housing between the first port and the third port and in communication with the inlet port, a second valve chamber (e.g., containing valve 18) defined by the housing between the second port and the forth port and in communication with the outlet port, a first three way ball valve 17 disposed in the first valve chamber for controlling flow between the first and third ports, and a second three-

way ball valve 18 disposed in the second valve chamber for controlling the flow between the second and fourth ports, and a coupling 19 for coupling the first three way valve 17 to the second three way valve 18 capable of causing the first three way ball valve and the second three way ball valve to move in unison, and capable of causing fluid to flow either entirely through the first strainer chamber 12, or entirely through the second strainer chamber 13, or through both the first strainer chamber 12 and the second strainer chamber 13 simultaneously since each valve includes a flow recess capable of being aligned with all of the ports simultaneously an intermediate position (see FIG. 2), a divider disposed within the housing between the first three way ball valve 17 and the second three way ball valve 18 forming the first valve chamber and the second valve chamber within the housing, the first and third ports communicating solely with the first valve chamber and the second and fourth ports communicating solely with the second valve chamber. Oliver et al disclose the first strainer chamber 12 and being formed unitarily with the housing but fail to specify the second strainer chamber as being detachably mounted to the housing. Elliott discloses the concept of providing a first strainer chamber and housing that are unitary (e.g., the left hand section including the inlet and outlet shown in FIG. 1) and a second strainer housing (e.g., the right hand section) that is detachably mounted to the housing and suggests that such an arrangement facilitates construction and repair of the filter. It would have been obvious to have modified the filter of Oliver et al so as to have included a housing that was unitary with the first strainer chamber and a second strainer chamber that was detachably mounted to the housing as suggested by Elliott in order to facilitate

construction and repair of the filter. Oliver et al fail to expressly teach the coupling as providing flow through the first strainer chamber and the second strainer chamber simultaneously. Rea et al disclose an analogous filter including a coupling and ball valve arrangement (see FIGS. 1 and 6c) and suggests that such an arrangement permits flow through both strainer chambers simultaneously thereby providing an increased flow rate of filtered fluid . It would have been obvious to have modified the filter of Oliver et al so as to have included coupling and ball valve arrangement as suggested by Rea et al in order to permit flow through both strainer chambers simultaneously to increase the flow rate of filtered fluid.

With respect to claim 6, Oliver et al discloses a duplex strainer for straining a fluid comprising a housing having an inlet port 15 and an outlet port 16 (see FIGS. 1 and 2), a first strainer chamber 12 having first and second ports in separate fluid communication with the housing (e.g., the flow passages facing the valves 17 and 18, respectively), a second strainer chamber 13 having a third port (e.g., adjacent valve 17) and facing the first port and a fourth port (e.g., adjacent valve 18) facing the second port in separate fluid communication with the housing, a valve control including a first three way ball valve 17 for controlling flow between the housing and first and third ports, and a second three-way ball valve 18 for controlling the flow between the second and fourth ports, a divider disposed within the housing between the first three-way ball valve 17 and the second three-way ball valve 18 forming upper and lower chambers in the housing, the first and third ports communicating solely with the upper chamber and the second and fourth ports communicating solely with the lower chamber within the

housing, and a coupling 19 for coupling the first three way ball valve 17 to the second three way ball valve capable of causing the first three way ball valve and the second three way ball valve to move in unison, and capable of causing fluid to flow either entirely through the first strainer chamber 12, or entirely through the second strainer chamber, the first strainer chamber 12 being formed unitarily with the housing or through both the first strainer chamber and the second strainer chamber simultaneously since each valve includes a flow recess capable of being aligned with all of the ports simultaneously an intermediate position (see FIG. 2). Oliver et al fails to specify the limitation of the second strainer chamber as being detachably mounted to the housing. Elliott discloses the concept of providing a first strainer chamber and housing that are unitary (e.g., the left hand section including the inlet and outlet shown in FIG. 1) and a second strainer housing (e.g., the right hand section) that is detachably mounted to the housing and suggests that such an arrangement facilitates construction and repair of the filter. It would have been obvious to have modified the filter Oliver et al so as to have included a housing that was unitary with the first strainer chamber and a second strainer chamber that was detachably mounted to the housing as suggested by Elliott in order to facilitate construction and repair of the filter. Oliver et al fail to expressly teach the coupling as providing flow through the first strainer chamber and the second strainer chamber simultaneously. Rea et al disclose an analogous filter including a coupling and ball valve arrangement (see FIGS. 1 and 6c) and suggests that such an arrangement permits flow through both strainer chambers simultaneously thereby providing an increased flow rate of filtered fluid . It would have been obvious to have modified the

filter of Oliver et al so as to have included coupling and ball valve arrangement as suggested by Rea et al in order to permit flow through both strainer chambers simultaneously to increase the flow rate of filtered fluid.

Concerning claim 7, Elliot broadly suggests the limitation of the first strainer chamber, the first valve chamber, and the second valve chamber as all being formed unitarily with the housing (e.g., the left hand section carrying the valves 9, 10) with the second strainer chamber (e.g., the left hand section) detachably mounted from the housing so that the second strainer chamber can be detached from the housing without disconnecting the first and second valves 9, 10 from the housing so that the first and second valves can remain located in the housing when the second strainer chamber is detached.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al in view of Rea et al.

With respect to claim 4, Oliver et al discloses a duplex strainer for straining a fluid comprising a housing having an inlet port 15 and an outlet port 16 (see FIGS. 1 and 2), a first strainer chamber 12 having first and second ports in separate fluid communication with the housing (e.g., the flow passages facing the valves 17 and 18, respectively), a second strainer chamber 13 having a third port (e.g., adjacent valve 17) and facing the first port and a fourth port (e.g., adjacent valve 18) facing the second port in separate fluid communication with the housing, a first valve chamber (e.g., containing valve 17) defined by the housing between the first port and the third port and in

communication with the inlet port, a second valve chamber (e.g., containing valve 18) defined by the housing between the second port and the forth port and in communication with the outlet port, a valve control including a first three way valve 17 disposed in the first chamber for controlling flow between the first and third ports, and a second three-way valve 18 disposed in the second chamber for controlling the flow between the second and fourth ports, and a coupling 19 for coupling the first three way valve 17 to the second three way valve 18 capable of causing the first three way ball valve and the second three way ball valve to move in unison, and capable of causing fluid to flow either entirely through the first strainer chamber 12, entirely through the second strainer chamber, or through both the first strainer chamber 12 and the second strainer chamber 13 simultaneously since each valve includes a flow recess capable of being aligned with all of the ports simultaneously an intermediate position (see FIG. 2), the coupling including a first square recess formed in the first three way valve, a second square recess formed in the second three way valve, and a shaft 19, the shaft including first and second square ends with the first square end being received in the first square recess and the second square end being received in the second square recess. Oliver et al fail to specify the coupling as including first and second notches formed within in the first and second valves, respectively. Rea et al disclose an analogous filter including a ball valve 20 having a notch 21 and a shaft having a flange 15b received in the notch and suggests that such a ball valve design is economical to fabricate (see FIGS. 1-2). It would have been obvious to have modified the filter of Oliver et al so as to have included ball valves including notches as suggested by Rea et al in order to provide a

ball valve design that was economical to fabricate. Oliver et al fail to expressly teach the coupling as providing flow through the first strainer chamber and the second strainer chamber simultaneously. Rea et al disclose an analogous filter including a coupling and ball valve arrangement (see FIGS. 1 and 6c) and suggests that such an arrangement permits flow through both strainer chambers simultaneously thereby providing an increased flow rate of filtered fluid . It would have been obvious to have modified the filter of Oliver et al so as to have included coupling and ball valve arrangement as suggested by Rea et al in order to permit flow through both strainer chambers simultaneously to increase the flow rate of filtered fluid.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al in view of Rea et al and Elliott.

With respect to claim 5, Oliver et al discloses a duplex strainer for straining a fluid comprising a housing having an inlet port 15 and an outlet port 16 (see FIGS. 1 and 2), a first strainer chamber 12 having first and second ports in separate fluid communication with the housing (e.g., the flow passages facing the valves 17 and 18, respectively), a second strainer chamber 13 having a third port (e.g., adjacent valve 17) and facing the first port and a fourth port (e.g., adjacent valve 18) facing the second port in separate fluid communication with the housing, a valve control including a first three way valve 17 for controlling flow between the first and third ports, and a second three-way valve 18 for controlling the flow between the second and fourth ports, and a coupling 19 for coupling the first three way valve 17 to the second three way valve

capable of causing the first three way ball valve and the second three way ball valve to move in unison, and capable of causing fluid to flow either entirely through the first strainer chamber 12, entirely through the second strainer chamber, or through both the first strainer chamber 12 and the second strainer chamber 13 simultaneously since each valve includes a flow recess capable of being aligned with all of the ports simultaneously an intermediate position (see FIG. 2), the first strainer chamber 12 being formed unitarily with the housing, a divider (e.g., the portion between the ball valves) disposed within the housing forming upper and lower chambers within the housing, the coupling including a first square recess formed in the first three way valve, a second square recess formed in the second three way valve, and a shaft 19, the shaft including first and second square ends with the first square end being received in the first square recess and the second square end being received in the second square recess, the shaft extending through the divider. Oliver et al fail to specify the coupling as including first and second notches formed within in the first and second valves, respectively. Rea et al disclose an analogous filter including a ball valve 20 having a notch 21 and a shaft having a flange 15b received in the notch and suggests that such a ball valve design is economical to fabricate (see FIGS. 1-2). It would have been obvious to have modified the filter of Oliver et al so as to have included ball valves including notches as suggested by Rea et al in order to provide a ball valve design that was economical to fabricate. Oliver et al fail to expressly teach the coupling as providing flow through the first strainer chamber and the second strainer chamber simultaneously. Rea et al disclose an analogous filter including a coupling and ball valve arrangement (see FIGS.

1 and 6c) and suggests that such an arrangement permits flow through both strainer chambers simultaneously thereby providing an increased flow rate of filtered fluid . It would have been obvious to have modified the filter of Oliver et al so as to have included coupling and ball valve arrangement as suggested by Rea et al in order to permit flow through both strainer chambers simultaneously to increase the flow rate of filtered fluid. Oliver et al and Rea et al fail to specify the limitation of the first strainer chamber being formed unitarily with the housing and second strainer chamber as being detachably mounted to the housing. Elliott discloses the concept of providing a first strainer chamber and housing that are unitary (e.g., the left hand section including the inlet and outlet shown in FIG. 1) and a second strainer housing (e.g., the right hand section) that is detachably mounted to the housing and suggests that such an arrangement facilitates construction and repair of the filter. It would have been obvious to have modified the combination suggested by Oliver et al and Rea et al so as to have included a housing that was unitary with the first strainer chamber and a second strainer chamber that was detachably mounted to the housing as suggested by Elliott in order to facilitate construction and repair of the filter.

In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 1, 4, and 7 are rejected as being based upon a defective reissue oath under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

> "Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

Applicant's arguments filed on 8-14-05 have been fully considered but they are not persuasive.

Applicant argues that Elliott fails to disclose the housing having the inlet and outlet ports and a first strainer and a detachable second strainer as recited in claim 1, however, it is held that Elliott clearly discloses a housing having the inlet and outlet ports 4, 5 (e.g., the left hand section of part 2) and a detachable second strainer (e.g., the right hand section of part 2 detachable from the left hand section by removing bolts 3).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Savage

Matthew O Savage
Primary Examiner
Art Unit 1724

mos
September 19, 2005